

CLAIMS

What is claimed and desired to be secured by Letters Patent is as follows:

1. A poured-in-place horizontal slab comprising:
 - 5 a plurality of spaced-apart horizontal support members, each having a lower region; and a retaining layer system further comprising a lath extending across and attached to said lower region to form a segmented form, said retaining layer system being configured to simultaneously retain a significant amount of a lightweight concrete slurry poured within said segmented form, and support said lightweight concrete during curing to form the horizontal slab, and said lath having a plurality of aperatures which allow a small amount of said concrete slurry to exude through said lath.
- 10 2. The poured-in-place horizontal slab, as recited in claim 1, wherein said retaining layer system further comprises a barrier disposed between said lath and said fluid concrete to at least reduce the exuding of said concrete slurry through said lath.

3. The poured-in-place horizontal slab, as recited in claim 1, wherein an insulative material is positioned adjacent to said support members and in contact with at least one surface of said lightweight concrete.

4. The poured-in-place horizontal slab, as recited in claim 1, wherein a covering is attached to an upper surface of said lightweight concrete.

5. A poured-in-place wall comprising:
a plurality of spaced apart vertical support members with outer regions; and
a retaining layer system comprising a lath, wherein said support members are disposed within said retaining layer system and at least one of said outer regions is adjacent to said lath to form a segmented form, said retaining layer system being configured to retain a significant amount of a lightweight concrete slurry poured within said segmented form, and further configured to support said lightweight concrete during curing to form the horizontal slab, and said lath having a plurality of apertures which allow a small amount of said lightweight concrete slurry to exude through said lath.

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6. The poured-in-place wall, as recited in claim 5, wherein said retaining layer system further comprises a form wall, said form wall extends across said plurality of support members on at least one said outer regions opposite said

lath, said form wall configured to support a fluid, lightweight concrete within
said segmented form during curing to form the wall

7. The poured-in-place wall, as recited in claim 6, wherein a barrier is disposed between said lath and said concrete, said barrier configured to at least reduce said concrete from exuding away from said segmented form.
8. The poured-in-place wall as recited in claim 7, wherein said barrier has insulative qualities.
9. The poured-in-place wall as recited in Claim 5, wherein an insulative material is positioned within said segmented form to provide the wall with insulative qualities.
10. The poured-in-place wall, as recited in Claim 5, wherein a covering is attached to said retaining layer system.
11. A method of constructing a poured-in-place construction components utilizing a lightweight concrete comprising the steps of:
 - 15 establishing at plurality of structural members spaced at a pre-determined distance;

creating a segmented form by fixing a retaining layer system, comprising a lath, around said structural members, wherein said lath extends across said plurality of structural members on at least one outer region to support a significant amount of a lightweight concrete slurry poured within said segmented form;

5 pouring said lightweight concrete slurry into said segmented form to at least cover a substantial portion of said structural members and exude a small portion through said lath; and

10 curing said lightweight concrete slurry to a rigid state so that said lightweight concrete is fixed in said segmented form thereby creating the construction component.

12. The method of constructing a poured-in-place construction component as recited in claim 11, wherein the step of creating a segmented form further comprises the step of placing a form wall across said plurality of structural members opposite of said lath to support a fluid, lightweight concrete within said segmented form during curing to form the wall.

13. The method of constructing a poured-in-place construction component as recited in claim 11, further comprising the step of placing a barrier between said lath and said concrete, said barrier configured to at least reduced said concrete from partially exuding through said lath.

14. The method of constructing a poured-in-place construction component as recited in claim 13, further comprising the step of inserting an insulative material within said segmented form to provide the construction component with insulative qualities.

5 15. The method of constructing a poured-in-place construction component as recited in claim 11, further comprising the step of attaching a covering to said retaining layer system.

10 16. The method of constructing a poured-in-place construction component as recited in claim 12, further comprising the step of removing said form wall when said concrete has cured.

17. The method of constructing a poured-in-place construction component as recited in claim 16, further comprising the step of attaching a covering to said cured concrete.

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